

(12) 按照专利合作条约所公布的国际申请

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国际局



(43) 国际公布日:

2005年3月24日(24.03.2005)

PCT

(10) 国际公布号:

WO 2005/026504 A1

(51) 国际分类号⁷: F01M 9/06
(21) 国际申请号: PCT/CN2004/000998
(22) 国际申请日: 2004年8月27日(27.08.2004)
(25) 申请语言: 中文
(26) 公布语言: 中文
(30) 优先权: 03210165.1 2003年8月29日(29.08.2003) CN

PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

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(71)(72) 发明人/申请人: 胡济荣(HU, Ji-Rong) [CN/CN]; 中国浙江省永康市古山工业区星月集团总师办, Zhejiang 321307 (CN).

(74) 代理人: 广东国欣律师事务所(GUANGDONG GUOXIN LAW FIRM) 中国广东省深圳市红岭中路1010号国际信托大厦一楼, Guangdong 518008 (CN).

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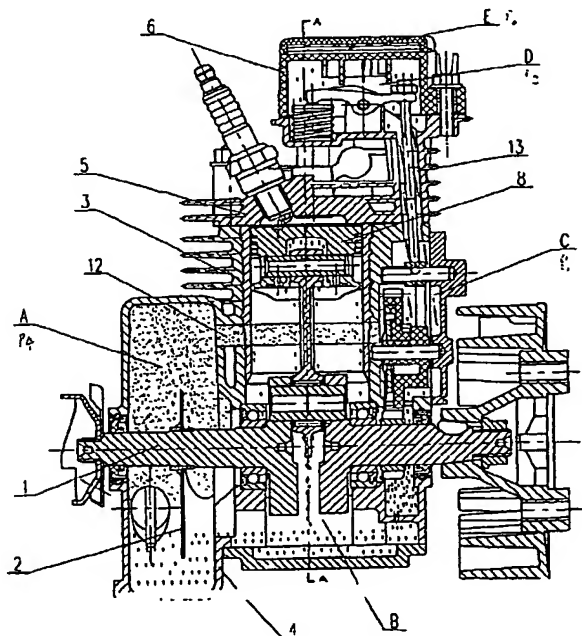
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(54) Title: A SMALL FOUR-STROKE GASOLINE ENGINE WITH OIL MIST LUBRICATION

(54) 发明名称: 油雾润滑的小型四冲程通用汽油机



(57) Abstract: The invention discloses a small four-stroke gasoline engine with oil mist lubrication. The lubrication oil way of the engine includes a crankshaft chamber (B), a camshaft chamber (C), an upper rocker arm chamber (D), and a condensation chamber (E). The camshaft chamber (C) communicates with the upper rocker arm chamber (D) via a tappet cavity. The upper rocker arm chamber (D) communicates with the condensation chamber (E). An oil mist chamber (A) is surrounded by an upper case body (3) and a lower case body (4) at the side of the crankshaft chamber (B), the bottom of the oil mist chamber (A) communicates with the crankshaft chamber (B). An agitation impeller is fixed on a crankshaft, which extends into the oil mist chamber (A). An oil way (12) is provided on the upper case body (3) between the oil mist chamber (A) and the camshaft chamber (C). An oil return way (15) is provided on a cylinder head assembly (5). An oil return way (14) is provided on the upper case body (3). An upper opening of the oil return way (15) communicates with the upper rocker arm chamber (D), a lower opening of the oil return way (14) communicates with the oil return way (14), and a lower opening of the oil return way (14) communicates with the crankshaft chamber (B). The conventional lubricating mode is changed by the structure of the invention, which makes use of the pressure change during the reciprocating movement of a piston assembly (8) to attain the circulation of oil. The structure is simple, reliable in operation and has small consumption in power.

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